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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,419	09/24/2004	Kazuhiro Okuyama	HEIW:035	3301

7590

08/10/2005

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EXAMINER

COSTALES, SHRUTI S

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/509,419

Applicant(s)

OKUYAMA, KAZUHIRO

Examiner

Shruti S. Costales

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/24/04 & 6/29/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements submitted on September 24, 2004 and June 29, 2005 were filed in compliance with the provisions of 37 CFR § 1.97.

Accordingly, the information disclosure statements filed by the applicant have been considered by the Examiner.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "A resin composition for an optical part having a polyarylene sulfide, a modified polyphenylene ether, a non-fibrous filler, and a fibrous filler, and an optical part formed from molding said resin composition".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by the machine translation of Japanese Publication Number 06-220323 to Dainippon Ink & Chem Inc. (cited on applicant's PTO-1449 filed on September 24, 2004).

Dainippon discloses a resin composition having 20 to 70 wt% of a polyphenylene sulfide resin, 70 to 30 wt% of a modified polyphenylene ether resin, 1 to 10 wt% of electrically conductive carbon fiber, 0 to 2 wt% of an organic silane compound, 3 to 15 wt% of a thermoplastic elastomer, and 5 to 20 wt% of an inorganic filler having plate particle shape (see Abstract). It is to be noted that the silane compound is a coupling agent (Paragraphs [0029]-[0030]), the conductive carbon fiber corresponds to the fibrous filler and the inorganic filler having plate particle shape corresponds to the non-fibrous filler of the presently cited claim.

In light of the above discussion, it is clear that the presently cited claim is anticipated.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dainippon in view of the machine translation of Japanese Publication Number 2001-294751 to Idemitsu Petrochem Co. Ltd. (cited on applicant's PTO-1449 filed on September 24, 2004).

As discussed above in paragraph 4, Dainippon discloses a resin composition having 20 to 70 wt% of a polyphenylene sulfide resin, 70 to 30 wt% of a modified polyphenylene ether resin, 1 to 10 wt% of electrically conductive carbon fiber, 0 to 2 wt% of an organic silane compound, 3 to 15 wt% of a thermoplastic elastomer, and 5 to 20 wt% of an inorganic filler having plate particle shape (see Abstract). It is to be noted that the silane compound is a coupling agent (Paragraphs [0029]-[0030]), the conductive carbon fiber corresponds to the fibrous filler and the inorganic filler having plate particle shape corresponds to the non-fibrous filler of the presently cited claim. It is further disclosed by Dainippon that the plate particle shaped inorganic filler is mica (Paragraphs [0034]-[0036]). It is to be noted that the amounts of the various components of Dainippon's composition are disclosed in wt% instead of vol% as recited in the presently cited claims. However, the ranges of the amounts of the various components of Dainippon's composition disclosed in wt% are broad enough to encompass the amounts as disclosed in the presently cited claims in vol%.

The difference between Dainippon and the presently claimed invention is the requirement of a non-crystalline resin having a glass transition temperature of 180° C or

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higher and molding an optical part from said resin composition as recited in the presently cited claims.

Idemitsu, which is drawn to a polyarylene sulfide resin composition having excellent moldability to provide an optical pickup device (Abstract), discloses a non-crystalline resin having a glass transition temperature of 180° C or higher (Abstract), wherein the non-crystalline resin includes polysulfone, polyphenylene ether, polyether sulphone, polyether imide, etc. (Paragraph [0019]). Idemitsu's resin composition is molded into optical devices (Paragraphs [0025]-[0026]). It is to be noted that Idemitsu

It would have been obvious to one of ordinary skill in the art to add the non-crystalline resin having a glass transition temperature of 180° C or higher as disclosed by Idemitsu into Dainippon's composition and mold optical products from the resulting composition therefrom because melt kneading can be performed easily (Paragraph [0017]), therein intrinsically resulting in a better quality molded optical product, thereby obtaining the invention as set forth in the presently cited claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Japanese Publication Number 2002-69298 to Toray Ind Inc., drawn to a resin composition providing material suitable for components of an optical recording apparatus, has been cited as an "X" reference in the International Search Report for PCT/JP03/03677 and has not been used to reject the presently claimed

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invention because the rejections resulting therefrom would be cumulative to the rejections above in paragraphs 3-6.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shruti S. Costales whose telephone number is (571) 272-8389. The examiner can normally be reached on Monday - Friday, 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

SSC
Shruti S. Costales
August 8, 2005

Vasu Jagannathan
VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700